

## **NEWS ADVISORY**

For Immediate Release: June 28, 2011

Contact: Missouri River Joint Information Center MRJIC@usace.army.mil 402-996-3877

## Corps buttresses 2.1 miles of Council Bluffs levees

**Council Bluffs, Iowa**—The U.S. Army Corps of Engineers is in the process of bolstering approximately 2.1 miles of levee to provide additional flood risk reduction for the city of Council Bluffs.

Work on the 12 levee segments is estimated to total approximately \$7.6 million.

"We've identified twelve levee segments that have experienced sand boils or seepage issues," said Project Manager Bryan Cisar. "In a number of those cases we're installing seepage blankets to provide additional flood risk reduction measures."

Sand boils are those places where water has found its way sometimes hundreds of feet from the river to burble and spew sand and water. Seepage takes place when water slowly escapes through the levee.

Cisar, a Corps veteran with more than 24 years experience, said the purpose of installing an emergency seepage blanket is to stabilize the existing foundation material on the protected side of levees, allowing water under seepage and ground permeated rainwater to wick out of the soil, therefore limiting the level of damage the levee sustains.

Cisar described a couple of the key aspects considered prior to incorporation of construction of the emergency seepage blanket. One is the existence of a berm near the landward base of the levee. If no berm exists, the Corps determines whether one needs to be installed before buttressing the levee with seepage blankets.

Another important facet effecting the decision regarding the construction of an emergency seepage blanket is the condition of the area of concern: Is it flat, sloped, laden with undergrowth, or full of grown trees? All dictate a markedly different course of action.

Once these issues have all been resolved, installation can commence, Cisar said. Then, upon the flat surface adjacent to the levee, a nonwoven, permeable, eight ounce, geotextile filter fabric is laid down to hold the present soil material while allowing water to wick out. Finally, a granular sand or gravel is placed atop the filter fabric.

Experts with the Corp and the City of Council Bluffs are keeping a vigilant eye out for any issues along the entire levee system."

"One of the most common issues we see are animal holes," said Cisar. "Be they fox, badger, groundhog mole or some other burrowing creature, their excavations can seriously undermine the stability of a levee if left unchecked. Once found, these holes need to be filled in."

[Type text]

"The City of Council Bluffs is appreciative of the ongoing technical and direct assistance provided by the Corp," said Donald Gross, Public Information Officer for Council Bluffs. "We are coordinating with the Corps as they supplement our efforts to protect the city of Council Bluffs."

For general questions regarding our flood response information efforts, please call (402) 996-3877, (877) 214-9110 or e-mail us at MRJIC@usace.army.mil. Please follow us on Facebook (<a href="www.facebook.com/OmahaUSACE">www.facebook.com/OmahaUSACE</a>), (<a href="www.facebook.com/OmahaUSACE">www.facebook.com/OmahaUSACE</a>), (<a href="www.futter.com/OmahaUSACE">www.futter.com/OmahaUSACE</a>), YouTube (<a href="www.youtube.com">www.youtube.com</a>), and FLICKR (<a href="www.flickr.com">www.flickr.com</a>) for the latest updates regarding our flood response operations.

You can also find flood inundation maps and local emergency management contact information on our social media sites as well as our district Web site at <a href="http://www.nwo.usace.army.mil">http://www.nwo.usace.army.mil</a>.

###